

## CLAIMS

What is claimed is:

1. A method of learning associations between a plurality of tires each having a unique identification code and a plurality of locations for tires, the method comprising the steps of,  
5 receiving the unique identification codes from each tire of the plurality of tires in response to a change in tire pressure in said each tire in a predetermined order of the plurality of locations for tires; and  
10 correlating the receipt of the unique identification codes to the predetermined order of the plurality of locations for tires to thereby associate each tire of the plurality of tires to one location of the plurality of locations for tires.
2. The method of claim 1, wherein the change in tire pressure is an operator-supplied change in tire pressure.
3. The method of claim 1, the method further comprising the steps of:  
5 determining if a particular received unique identification code is a first unique identification code received; and  
if so, erasing existing correlated unique identification codes.
4. The method of claim 1, the method further comprising the steps of:  
initiating a timer before receiving a first identification code;  
resetting said timer after receiving each identification code; and

5           terminating said method if said timer indicates that a predetermined threshold of time has expired before an identification code is received.

5.       The method of claim 1, further comprising the steps of:  
testing each second and subsequently received identification code to  
determine if said identification code is unique compared to said  
identification codes already stored; and  
5       storing only identification codes that are determined to be unique  
compared to said identification codes already stored.

6.       The method of claim 1, wherein said receiving step further comprises the step of communicating receipt of said unique identification code to a user.

7.       A tire pressure monitor system for a vehicle having a plurality of tires each mounted on a wheel at one of a plurality of locations relating to said vehicle, the tire pressure monitor system comprising:  
a plurality of tire pressure detectors each coupled to one of the plurality  
5       of wheels, each tire pressure detector further comprising:  
a transmitter having a unique identification code; and  
a pressure sensor configured to detect changes in the pressure  
in said one tire mounted on said wheel;  
a receiver configured to receive said transmitted unique identification  
10       codes;  
a processor coupled to said receiver, wherein said processor is  
configured to respond to a user-supplied command to relearn  
associations between said identification codes and said  
locations by accepting said received identification codes in a  
15       predetermined order related to said locations; and

a memory coupled to said first processor, wherein said memory is configured to store each said identification code in association with each said respective location.

8. The tire pressure monitor system of claim 1, wherein each tire pressure detector further comprises a detector processor coupled to said transmitter and to said pressure sensor and configured to control said transmitter to transmit said unique identification code in response to a user-supplied signal.

9. The tire pressure monitor system of claim 1, wherein said user-supplied signal comprises a pressure change in said each tire, and wherein said pressure sensor is configured to provide an indication of the pressure change to said detector processor.

10. The tire pressure monitor system of claim 1, wherein each said detector processor is configured to:  
determine a magnitude of the pressure change within a predetermined time period;  
compare the pressure change magnitude within the predetermined time period to a predetermined threshold;  
control the transmitter to transmit pressure data and the identification code periodically if the determined magnitude is less than the predetermined threshold; and  
control the transmitter to transmit at least the identification code immediately if the determined magnitude is greater than the predetermined threshold.

11. The tire pressure monitor system of claim 1, further comprising at least one device for communicating with a human user, said at least one device coupled to and controlled by said first processor.

12. The tire pressure monitor system of claim 1, wherein said at least one device for communicating generates an indication that said unique identification code has been stored.

13. The tire pressure monitor system of claim 1, wherein said at least one device generates an indication that said first processor has been commanded to relearn said associations.

14. The tire pressure monitor system of claim 1, wherein said transmitter coupled to each tire comprises a transmitter coupled to a valve stem of each said tire.

15. The tire pressure monitor system of claim 1, wherein said plurality of transmitters is equal to said plurality of tires.

16. The tire pressure monitor system of claim 1, wherein said vehicle has four wheels and said predetermined order consists of the sequence: left front, right front, right rear, left rear.

17. An apparatus comprising an electronic automotive tire pressure monitor receiver configured to relearn associations between tire pressure transmitter identification codes and locations for vehicle tires based at least partially upon a user-supplied tire pressure change to each tire in a predetermined order.

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18. The electronic automotive tire pressure monitor of claim 1, further configured to signal a user with pre-existing devices in the vehicle.

19. A method of relearning associations between a plurality of tire pressure transmitters and a plurality of locations for tires, the method comprising the step of inducing transmission of tire-specific identification codes to a tire pressure monitor receiver configured to store the identification codes correlated to the locations for tires by an operator manually interrogating, in a predetermined order, tire pressure detectors at each location of the plurality of locations for tires.

20. The method of claim 1, further comprising the step of manually initiating a mode change in said tire pressure monitor receiver, said mode change enabling said monitor to correlate said predetermined order of identification codes with a predetermined order of tire locations.